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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/912,485 | 07/26/2001 | Tetsuya Ueno | KUD.042 | 6277 |
| 21254 | 7590 | 03/11/2005 | EXAMINER | |
| MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817 | | | CHOU, ALBERT T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2662 | |

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 09/912,485 | Applicant(s) UENO, TETSUYA | |
| | Examiner Albert T. Chou | Art Unit 2662 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 2 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Ma et al. (US Patent Number: 6,795,867), hereinafter referred to as Ma.

Regarding claim 1, Ma teaches a **Gatekeeper 108** connected to an H.323 network (Figure 1; col. 4; lines 40-46; A gatekeeper connected to an H323 network), comprising: a message receiving section (Figure 5, steps 502, 506 & 518; a first message receiving section) which receives the original setup message from an endpoint **112** (Figure 1; col. 5, lines 63-64; figure 5; col. 9, lines 11-12; which receives a gatekeeper discovery message from an end point); a transmitting section (Figure 5, steps 504, 508, 516 & 522; col. 9, lines 13-14; a transport data transmitting section); and a **Load Management Unit LMU** (Figure 1; col. 2, lines 48-49; a control section) which determines which gatekeeper of a plurality of gatekeepers should setup and service the call based upon loading of the gatekeepers (Col. 2, lines 52-53; col. 8, lines 55-56; which determines whether said gatekeeper has the lightest load among a plurality of gatekeepers including said gatekeeper). Based on the its selection (Col. 2.

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lines 53-54; when it is determined that said gatekeeper has the lightest load), LMU either directs the assigned gatekeeper to setup and service the call or redirects the endpoint to a servicing gatekeeper (Col. 2, lines 53-56; and controls said transport data transmitting section to transmit transport data to said end point in response to the gatekeeper discovery message).

Regarding claim 3, Ma teaches the **LMU** (Figure 1; said control section), contained in the **Gatekeeper 108**, determines which **Gatekeeper 108 or 109** will service the call (Figure 1; col. 6, lines 10-12) based upon loading of the gatekeepers (Figure 1; col. 8, lines 55-56). To enable this function, it is inherent in Ma that a memory / storage exists in **LMU** for holding and maintaining the current load information among a plurality of gatekeepers. Ma further teaches if the **LMU** (Col. 6, line 13; a first control section) determines that the **Gatekeeper 108** will service the call (Col. 6, lines 13-15; when it is determined that said gatekeeper has the lightest load), it transfers control for continued call setup to the **Gatekeeper 108** for the endpoint which initiates the call (Col. 6, lines 13-15; transmit transport data to said end point in response to said gatekeeper discovery message).

Regarding claim 8, Ma teaches a load distributing method in a communication system which comprises an **IP Network 102** (Figure 1; col. 3, line 55; a network); an **endpoint 112** operatively connected to **IP Network 102** (Figure 1; col. 3, lines 57-59; an endpoint operatively connected to said network); and a plurality of **Gatekeepers 108-109** (Figure 1; col. 3, lines 55-56; a plurality of gatekeepers including first and second gatekeepers), said method comprising the steps of

(a) Receiving a call setup message from **endpoint 112** to initiate a call to **endpoint 114** (Figure 1, col. 5, lines 63-64; receiving a gatekeeper discovery message from said end point in said first gatekeeper);

(b) Upon receipt of the setup message, the **LMU**, contained in the **Gatekeeper 108**, determines which **Gatekeeper 108 or 109** will service the call (Figure 1; col. 6, lines 10-12; of said plurality of gatekeepers, in said first gatekeeper to determine whether said first gatekeeper has the lightest load among said plurality of gatekeepers) based upon loading of the gatekeepers (Figure 1; col. 8, lines 55-56; referring to a load state list which indicates identifiers of ones having lighter loads); and

(c) If the **LMU** determines that the **Gatekeeper 108** will service the call (Col. 6, lines 13-15; when it is determined that said gatekeeper has the lightest load), it transfers control for continued call setup to the **Gatekeeper 108** for the **endpoint 112** (Col. 6, lines 13-15; transmitting transport data to said end point in response to said gatekeeper discovery message in said first gatekeeper).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-7, 10-12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US Patent Number: 6,795,867), hereinafter referred to as

Ma, in view of Mortsof et al. (US Patent Number: 6,229,804), hereinafter referred to as Mortsof.

Regarding claims 4, 10 and 12, Ma teaches **LMU** (Col. 2, lines 48-56; a control unit with load distribution method), contained in the **Gatekeeper 108**, determines which **Gatekeeper 108 or 109** will service the call based upon loading of the gatekeepers (Figure 1; col. 6, lines 10-12; col. 8, lines 55-56; calculating a load of said first gatekeeper as a first load). Ma further teaches a concept of Gatekeeper Zone (Col. 5, lines 30-41) and the coupling among the Gatekeepers 302, 304 and 306 is required so that the LMUs may communicate with each other of the LMUs to support call redirection operation (Figure 3A; col. 7, lines 43-46). Ma does not disclose expressly how each gatekeeper's load information is exchanged or shared among gatekeepers in the zone (a load state notice message receiving section which receives a load state notice message from one of said plurality of gatekeepers as a notice transmitting gatekeeper, said load state notice message including a load of said notice transmitting gatekeeper; a calculating section which calculates a load of said gatekeeper as a self-load; and a second control section which extracts the load of said notice transmitting gatekeeper from said load state notice message, and compares the extracted load and the self-load, and writes an identifier of said notice transmitting gatekeeper at least into said load state list, when the extracted load is lighter than the self-load).

Mortsof teaches a method involves assigning a gatekeeper priority value, which is analogous to "load state" in the claims, to each of the gatekeepers in the zone (Col. 4, lines 22-23). The gatekeeper priority values or load states are used to indicate the

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rank of one gatekeeper with respect to all other gatekeepers (Col. 4, lines 23-27).

Mortsolf teaches when one of the gatekeepers is initialized or rebooted or otherwise brought on-line into the zone, it broadcasts an "active gatekeeper claim or message"

(Col. 4, lines 34-38). Each gatekeeper in the zone receives the active gatekeeper

message (receiving a load state notice message including a load of said notice

transmitting gatekeeper) from the first broadcasting gatekeeper (Col. 4, lines 53-55;

Figure 3, steps 54-56; a load state notice message receiving section which receives a

load state notice message from one of said plurality of gatekeepers as a notice

transmitting gatekeeper). The Gatekeepers each independently (Col. 4, lines 55-58;

extracts the load of said notice transmitting gatekeeper from said load state notice

message) compare the gatekeeper priority value (load state) that they were assigned

(Col.4, lines 27-31; a calculating section which calculates a load of said gatekeeper as

a self-load) with the gatekeeper priority value (load state) contained in the first active

gatekeeper message (Col. 4, lines 55-58; compares the extracted load and the self-

load). In response to this comparison, the Gatekeepers each broadcast a new active

gatekeeper message if their gatekeeper priority value is higher than the gatekeeper

priority value in the first active gatekeeper message (Col. 4, lines 58-62; Figure 3,

steps 58-60; writes an identifier of said notice transmitting gatekeeper at least into said

load state list, when the extracted load is lighter than the self-load). Ma and Mortsolf

are analogous art because they are from the same field of endeavor to a method and

apparatus for distributing load among a plurality of gatekeepers of the Internet

Telephony communication system by redirecting communications from one gatekeeper

to another gatekeepers. Since the load information of each gatekeeper is available as disclosed in Ma, it could be shared by or exchanged among gatekeepers via the broadcast of active gatekeeper message as disclosed in Mortsof without requiring any new efforts in hardware or software development. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Mortsof with Ma to obtain the invention as specified in claims 4, 10 and 12.

Regarding claim 5, Mortsof teaches each gatekeeper in the zone receives the active gatekeeper message (receiving a load state notice message) from the first broadcasting gatekeeper (Col. 4, lines 53-55; Figure 3, steps 54-56; receiving a load state notice message including a load of said second gatekeeper as a second load from said second gatekeeper). The Gatekeepers each independently compare the gatekeeper priority value (load state) that they were assigned with the gatekeeper priority value (load state) contained in the first active gatekeeper message (Col. 4, lines 55-58; extracting said second load from said load state notice message; comparing said first load and said second load). In response to this comparison, the Gatekeepers each broadcast a new active gatekeeper message (Col. 4, lines 58-59; a load state request message transmitting section) if their gatekeeper priority value is higher than the gatekeeper priority value in the first active gatekeeper message (Col. 4, lines 58-62; transmit a load state request message with an identifier of said gatekeeper and said self-load to each of said plurality of gatekeepers). On the other hand, those Gatekeepers that have a gatekeeper priority value that is lower than the gatekeeper priority value in the first active gatekeeper message do not broadcast another active

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gatekeeper message (Col. 4, lines 62-65; Figure 3, step 64; and each of said plurality of gatekeepers selectively replies said load state notice message to said gatekeeper based on a load of each of said plurality of gatekeepers).

Regarding claim 6, Mortsof teaches each gatekeeper (Col. 4, lines 53-55; Figure 3, steps 54-56; a load state notice message receiving section) in the zone receives the active gatekeeper message (receiving a load state notice message including a load of said notice transmitting gatekeeper) from the first broadcasting gatekeeper (Col. 4, lines 53-55; Figure 3, steps 54-56; receives a load state notice message from one of said plurality of gatekeepers as a notice transmitting gatekeeper). The Gatekeepers each independently (Col. 4, lines 55-58; extracts the load of said each gatekeeper from said load state request message) compare the gatekeeper priority value (load state) that they were assigned (Col.4, lines 27-31) with the gatekeeper priority value (load state) contained in the first active gatekeeper message (Col. 4, lines 55-58; compares the extracted load and the self-load). In response to this comparison, the Gatekeepers (a load state notice message transmitting section) each broadcast a new active gatekeeper message (Col. 4, lines 58-62; Figure 3, steps 58-60; transmit a load state notice message with the self-load and said identifier of said gatekeeper to said each gatekeeper) if their gatekeeper priority value is higher than the gatekeeper priority value in the first active gatekeeper message (Col. 4, lines 58-62; Figure 3, steps 58-60; when the extracted load is lighter than the self-load).

Regarding claim 7 and 13, Mortsof teaches a Gatekeeper is not permitted to respond to gatekeeper requests messages if its unique gatekeeper priority value is

lower than a gatekeeper priority value it received from one of the other Gatekeepers (Col. 8, lines 55-58; Figure 3; steps 56, 58, 60 and 64; discarding said load state request message, when the extracted second load is not lighter than said first load).

Regarding claim 11, Mortsof teaches when one of the Gatekeepers is initialized or rebooted or otherwise brought on-line into the zone of Gatekeepers, it broadcasts a message, a first active gatekeeper message or alternatively as an active gatekeeper claim" (Col. 4, lines 34-37; transmitting a load state request message with an identifier of said first gatekeeper and said first load to said second gatekeeper).

Allowable Subject Matter

5. Claims 2 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert T. Chou whose telephone number is 571-272-6045. The examiner can normally be reached on 8:30 - 17:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC

Albert T. Chou

March 2, 2005



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